

5. *Classroom Groupings and Activities* by Jose Blackorby, Camille Marder, Renée Cameto, Anne-Marie Guzman, and Michael Chorost

This chapter addresses the instructional strategies and activities that characterize the experiences of students with disabilities in both general and special education language arts settings. It includes a discussion of the instructional groupings that are used, ranging from whole-class to individual instruction, and a look at both general instructional activities and those that are specific to reading.

Organizing Groups to Meet Students' Needs

Most American classrooms have a single teacher and a relatively large group of students, with the ratio of students to teachers sometimes exceeding 30 to 1. Classes also are increasingly heterogeneous with respect to students' culture, ethnicity, and English language proficiency (Carnine, Miller, et al., 1994; Harris et al., 1998; Kameenui & Carnine, 1998; McLaughlin et al., 2001; Vaughn et al., 1997). Students with disabilities contribute to the diversity in classrooms and to the range of student needs that must be met.

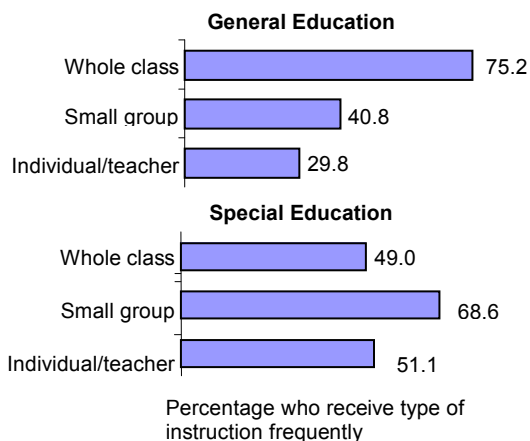
Considerable research suggests that lower student-teacher ratios help meet student needs because they make specific types of instruction, assessment, presentation, communication, and individualization more feasible than do larger ratios (Achilles & Finn, 2000; Achilles, Finn & Bain, 1998; Finn, 1999; Gersten & Dimino, 2001; Slavin, 1990). Therefore, it is not surprising that adapting the size of instructional groups is a common strategy that teachers use to meet students' needs. Many promising research-based practices, such as direct instruction, cooperative learning, peer tutoring, and strategic instruction, differ in focus or in the roles that students play, but they all reduce the size of the instructional group in one way or another (Carnine, Silbert, & Kameenui, 1997; Elbaum et al., 1999; Fuchs et al., 1997; Gersten & Carnine, 1986; Gersten & Dimino, 1990; Klingner & Vaughn, 1998; Maheady et al., 1996; O'Connor & Jenkins, 1995; Slavin, 1996; Vaughn et al., 1997.).

Therefore, it is important that SEELS has measured the types of instructional groupings that students with disabilities receive in the context of language arts instruction. Language arts teachers were asked to indicate the frequency with which the students with disabilities about whom they were reporting receive whole-class instruction, small-group instruction, and individual instruction from the teacher. The percentages of students with disabilities who receive instruction in each format often, as reported by teachers, are reported in this chapter.

Instructional Groupings by Instructional Setting

Students with disabilities receive instruction in a variety of groupings, which vary by instructional setting (Exhibit 5-1):

Exhibit 5-1
Instructional Groupings of Students with
Disabilities in Language Arts Classes, by
Instructional Setting



- In general education language arts classes, whole-class instruction is more common than small-group instruction, which, in turn, is more common than individual instruction. Three-fourths of students with disabilities in these classes receive whole-class instruction frequently, whereas 41% receive small-group instruction frequently, and 30% receive individual instruction from a teacher frequently.
- In special education language arts classes, small-group instruction is more common than whole-class instruction or individual instruction. Approximately two-thirds of students in special education settings receive small-group instruction frequently, whereas approximately half receive whole-class instruction or individual instruction from a teacher frequently.

Instructional Groupings: Disability Category Differences

Although smaller groupings could be beneficial for students across the disability spectrum, the use of different instructional groupings varies considerably by disability category.

- In general education language arts classes, students in all disability categories are more likely to receive whole-class instruction than small-group or individual instruction from a teacher. Between 64% and 81% of students in most disability categories receive whole-class instruction frequently, whereas between 28% and 43% of students in most disability categories receive small-group instruction frequently, and between 28% and 39% of students in most disability categories receive individual instruction frequently.

Exhibit 5-2
Instructional Groupings in Language Arts Classes,
by Disability Category and Instructional Setting

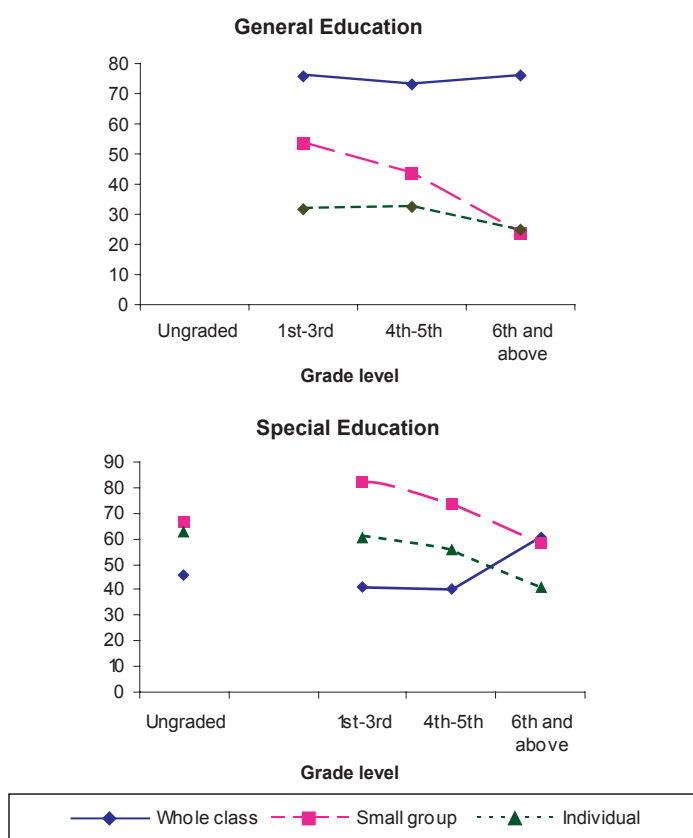
Percentage whose language arts instruction frequently involves:	Learning Disability	Speech/ Language Impairment	Mental Retardation	Emotional Disturbance	Hearing Impairment	Visual Impairment	Orthopedic Impairment	Other Health Impairment	Autism	Traumatic Brain Injury	Multiple Disabilities
General education											
Whole-class instruction	73.6 (3.4)	77.2 (2.6)	63.5 (6.6)	72.1 (4.3)	71.1 (4.4)	69.4 (4.2)	74.0 (3.8)	80.5 (3.8)	64.4 (6.0)	65.0 (9.2)	64.8 (12.4)
Small-group instruction	40.1 (3.8)	43.2 (3.1)	42.6 (6.8)	34.6 (4.6)	33.5 (4.5)	35.7 (4.4)	39.5 (4.3)	27.8 (4.3)	36.0 (6.0)	39.6 (9.3)	46.1 (12.9)
Individual instruction from teacher	34.1 (3.6)	25.0 (2.7)	39.4 (6.7)	32.8 (4.5)	29.3 (4.3)	27.8 (4.1)	34.5 (4.1)	32.2 (4.4)	36.5 (5.8)	35.5 (9.2)	53.7 (12.8)
Special education											
Whole-class instruction	55.7 (3.7)	43.9 (7.7)	39.4 (3.0)	49.5 (4.0)	53.5 (4.0)	38.1 (6.6)	49.1 (4.7)	41.9 (5.2)	25.8 (3.2)	46.7 (7.2)	40.3 (4.2)
Small-group instruction	68.9 (3.5)	78.5 (6.3)	71.3 (2.8)	59.9 (3.9)	59.1 (3.9)	54.3 (6.8)	68.4 (4.3)	75.0 (4.6)	52.3 (3.6)	71.1 (6.5)	60.7 (4.1)
Individual instruction from teacher	43.0 (3.7)	60.8 (7.4)	62.2 (3.0)	53.9 (4.0)	47.5 (4.0)	65.5 (6.4)	56.5 (4.7)	56.0 (5.2)	73.1 (3.2)	51.6 (7.2)	54.0 (4.2)
Sample size	690	566	619	512	709	505	600	490	667	224	415
Standard errors are in parentheses.											

- In general education language arts classes, students with speech impairments are among the most likely to receive whole-class instruction and are the least likely to receive individual instruction from a teacher. Students with other health impairments are the most likely to receive whole-class instruction and the least likely to receive small-group instruction, and students with multiple disabilities are the most likely to receive individual instruction.
- In special education settings, students in most disability categories are less likely to receive whole-class instruction than small-group instruction or individual instruction from a teacher. Except for students with autism, percentages of students who frequently receive whole-class instruction range from 38% (students with visual impairment) to 56% (students with learning disabilities).
- In special education settings, small group instruction is at least as common as individual instruction for students in all disability categories except autism or visual impairment, with the percentages of students who frequently receive small-group instruction ranging from 59% (students with hearing impairments) to 79% (students with speech impairments) and the percentages of students who frequently receive individual instruction ranging from 43% (students with learning disabilities) to 62% (students with mental retardation).
- In special education settings, students with autism or visual impairments are the most likely to receive individual instruction from a teacher frequently and among the least likely to receive small-group instruction or whole-class instruction frequently.

Instructional Groupings: Grade Level Differences

The organization of classrooms and schools, the complexity of material, and instructional approaches change dramatically as students move from elementary to middle school and from middle school to high school. Individual intact classes give way to variable class schedules. Skill acquisition changes to skill application and content knowledge mastery. SEELS data demonstrate these variations in the use of instructional groupings in language arts classes across the elementary and middle school grade levels (Exhibit 5-3).

Exhibit 5-3
Instructional Groupings of Students with Disabilities in Language Arts Classes, by Instructional Setting and Grade Level



- In general education settings, whole-class instruction is the most commonly used grouping, regardless of grade level. In the early grades, small-group instruction is more common than individual instruction from a teacher; however, its use declines over the grades, so that in middle school, both types of groupings are about equally common.
- In special education settings, small-group instruction and individual instruction from a teacher are more common than whole-class instruction through fifth grade. In sixth grade and higher, whole-class instruction and small-group instruction are about equally common.

- In ungraded classes in special education settings, small-group instruction and individual instruction are used with about the same frequency, and both are more common than whole-class instruction.

Instructional Groupings: Demographic Differences

The groupings used to instruct students with disabilities differ somewhat with students' household income and race/ethnicity (Exhibit 5-4).

Exhibit 5-4
Instructional Groupings of Students with Disabilities in Language Arts Classes, by Household Income, Race/Ethnicity, and Instructional Setting

Percentage whose language arts instruction frequently involves:	Household Income			Race/Ethnicity			
	\$25,000 and Less	\$25,001 to \$50,000	More than \$50,000	White	African American	Hispanic	Asian/Pacific Islander
General education							
Whole-class instruction	76.7 (3.8)	76.0 (3.7)	73.3 (3.5)	74.2 (2.1)	79.7 (4.8)	76.1 (5.5)	54.8 (20.8)
Small-group instruction	46.9 (4.5)	40.2 (4.3)	34.3 (3.7)	37.3 (2.3)	46.8 (5.9)	51.2 (6.5)	31.8 (19.4)
Individual instruction from teacher	35.3 (4.3)	37.9 (4.2)	20.8 (3.2)	26.6 (2.1)	39.1 (5.8)	34.4 (6.2)	24.4 (17.9)
Special education							
Whole-class instruction	51.0 (3.8)	49.5 (4.8)	46.4 (5.3)	47.3 (2.7)	48.3 (4.4)	57.5 (6.5)	33.1 (19.9)
Small-group instruction	68.1 (3.6)	67.8 (4.5)	62.3 (5.1)	68.7 (2.5)	68.0 (4.1)	72.5 (5.8)	80.6 (16.7)
Individual instruction from teacher	55.7 (3.8)	52.6 (4.7)	40.0 (5.1)	49.4 (2.7)	56.3 (4.3)	49.4 (6.5)	41.0 (20.8)
Sample size	1,625	1,338	1,594	3,953	1,172	710	108

Standard errors are in parentheses.

- In each instructional setting, whole-class instruction is about equally common, regardless of students' household income or racial/ethnic group.
- In each instructional setting, students from households in the lowest and middle income groups have similar experiences with regard to instructional groupings.
- In general education settings, students with disabilities in the highest income group are less likely than students from the lowest income group to receive small-group instruction or individual instruction frequently.
- In general education settings, African American students do not differ from students of other races/ethnicities in terms of the frequency with which they receive whole-class or small-group instruction; however,

they are more likely than white students to receive individual instruction frequently. In contrast, in these same settings, Hispanic students are more likely than white students to have small-group instruction frequently.

- There are no differences in instructional groupings for students of the various races/ethnicities in special education settings.

General Instructional Activities In Language Arts Classes

Instruction in a typical language arts class in American elementary or middle schools usually includes a variety of activities, ranging from teachers' presentations of new skills or material to small-group or independent work (National Center for Education Statistics, 1999). A teacher's choice among this variety of activities can reflect both the specific point in the curriculum and a strategy for how best to meet students' needs. For example, at one point in a unit, a teacher may have students answer questions and participate in class discussions, whereas at another, he or she may have students work together on presentations or projects. These activities differ in their purpose and the role that students play. Skilled teachers are able to adjust the mix of these activities to meet student needs (Gersten & Dimino, 2001; McLeskey & Waldron, 2002; Moody et al., 2000; Pressley et al., 2002; Vaughn et al., 2001).

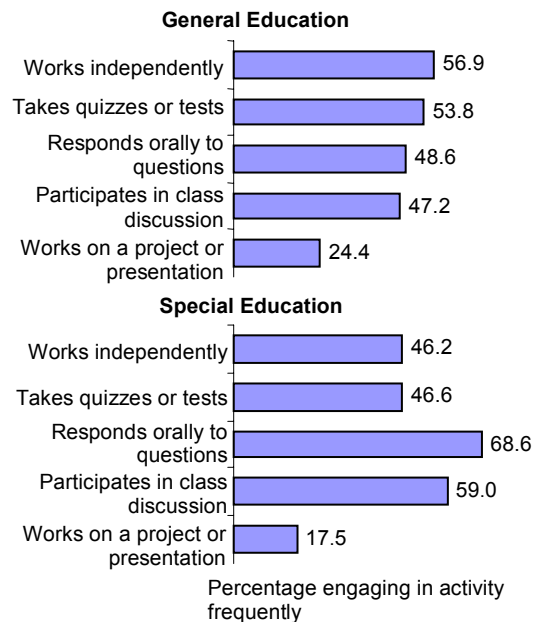
Instructional activities may vary greatly from classroom to classroom because of such factors as the subject matter being addressed, a teacher's style and preferences, students' ages and skill levels, and time of the school year. Having a student with a disability in a class also can play a role in shaping classroom activities because a teacher must consider the student's cognitive and behavioral abilities in determining what would best serve both the student and the class as a whole.

To provide a national perspective on the variety of classroom activities experienced by students with disabilities, SEELS asked teachers in the primary language arts setting of students with disabilities to rate the frequency with which those students engaged in the following: responding orally to questions, taking quizzes or tests, working independently, participating in class discussion, and working on a project or presentation.

General Instructional Activities Across Instructional Settings

Students with disabilities participate in a variety of instructional activities in language arts classes, with important differences across instructional settings (Exhibit 5-5).

Exhibit 5-5
General Instructional Activities of Students with
Disabilities in Language Arts Classes,
by Instructional Setting



- Compared with students with disabilities in general education classes, students in special education settings are less likely to work independently or take quizzes or tests frequently and are more likely to respond to questions or participate in class discussions frequently. Setting is not related to the frequency with which students work on projects or presentations.
- In general education settings, nearly 60% of students with disabilities frequently work independently, and approximately half take quizzes or tests, respond orally to questions, or participate in class discussions frequently. They are much less likely to work on projects or presentations; approximately one-fourth do so frequently.
- In special education settings, approximately two-thirds of students frequently respond orally to questions, 60% participate in class discussions, and 46% take quizzes or tests or work independently. Approximately 18% work on projects or presentations frequently.

General Instructional Activities: Disability Category Differences

Participation in each type of instructional activity in language arts classes not only varies by setting, but also is strongly associated with a student's disability (Exhibit 5-6).

Exhibit 5-6
General Instructional Activities in Language Arts Classes,
by Disability Category and Instructional Setting

Percentage of students engaging in activity frequently in:	Learning Disability	Speech/ Language Impair- ment	Mental Retar- dation	Emotional Distur- bance	Hearing Impair- ment	Visual Impair- ment	Ortho- pedic Impair- ment	Other Health Impair- ment	Autism	Traumatic Brain Injury	Multiple Disabili- ties
General education											
Responding orally to questions	39.5 (3.7)	56.5 (3.1)	25.3 (6.1)	39.0 (4.7)	53.1 (4.7)	61.7 (4.4)	50.0 (4.4)	51.7 (4.8)	39.4 (6.1)	65.8 (9.3)	49.2 (13.0)
Taking quizzes or tests	54.0 (3.8)	55.6 (3.1)	32.5 (6.6)	50.2 (4.8)	43.7 (4.7)	52.9 (4.5)	50.0 (4.3)	56.6 (4.7)	35.5 (6.0)	39.9 (9.6)	30.1 (11.8)
Working independently	49.1 (3.8)	66.0 (2.9)	23.4 (6.0)	43.7 (4.7)	56.8 (4.7)	57.0 (4.5)	54.3 (4.4)	52.1 (4.8)	41.0 (6.1)	38.8 (9.7)	44.5 (12.7)
Participating in class discussion	39.1 (3.7)	55.2 (3.1)	21.8 (5.8)	32.8 (4.5)	44.8 (4.8)	58.9 (4.5)	50.7 (4.4)	47.8 (4.8)	32.2 (5.8)	54.1 (9.7)	48.9 (12.8)
Working on a project or presentation	26.8 (3.4)	23.8 (2.6)	13.2 (4.7)	23.6 (4.1)	21.6 (3.9)	28.2 (4.1)	21.9 (3.6)	22.6 (4.0)	17.0 (4.7)	26.6 (8.6)	24.1 (11.1)
Special education											
Responding orally to questions	70.7 (3.4)	75.7 (6.5)	63.9 (2.9)	68.5 (3.7)	63.2 (3.9)	67.2 (6.4)	71.9 (4.2)	69.0 (4.9)	43.5 (3.6)	70.6 (6.6)	57.7 (4.1)
Taking quizzes or tests	54.1 (3.7)	42.9 (7.7)	35.0 (2.9)	48.9 (4.0)	43.2 (4.0)	40.7 (6.7)	38.0 (4.5)	51.6 (5.3)	17.0 (2.8)	41.1 (7.2)	27.4 (3.7)
Working independently	52.8 (3.7)	37.4 (7.4)	37.7 (3.0)	51.7 (4.0)	46.9 (4.0)	34.6 (6.4)	38.2 (4.5)	43.6 (5.3)	33.9 (3.5)	36.9 (7.0)	33.5 (4.0)
Participating in class discussion	63.5 (3.6)	61.3 (7.4)	52.0 (3.1)	61.4 (3.9)	56.9 (4.0)	49.5 (6.8)	59.9 (4.6)	57.6 (5.2)	23.5 (3.1)	57.0 (7.2)	47.5 (4.2)
Working on a project or presentation	22.9 (3.1)	16.5 (5.7)	8.8 (1.7)	14.9 (2.8)	13.1 (2.7)	11.8 (4.4)	12.9 (3.1)	16.3 (3.9)	3.2 (1.3)	9.2 (4.2)	11.5 (2.7)
Sample size											
General education	342	491	97	206	280	304	328	272	199	77	52
Special education	356	86	526	312	437	205	275	223	469	147	375

Standard errors are in parentheses.

- In general education classes, participation in most types of instructional activities varies widely across the disability categories. For example, the percentages of students who frequently take quizzes or tests range from 30% (students with multiple disabilities) to 57% (students with other health impairments). There is less variation in the percentages of students who work on projects or presentations frequently, with percentages for most groups of students ranging from 17% (students with autism) to 28% (students with visual impairments).
- In special education settings, relatively little variation occurs across disability categories in the percentages of students who frequently work independently (19 percentage points across all categories, but only eight percentage points across all but the two extreme categories). Greater degrees of tailoring activities to disability differences is apparent regarding or taking quizzes or tests (a 37-point range in the percentages of students who take them frequently) and participating in class discussion (a 40-point range in the percentages of students who participate frequently).

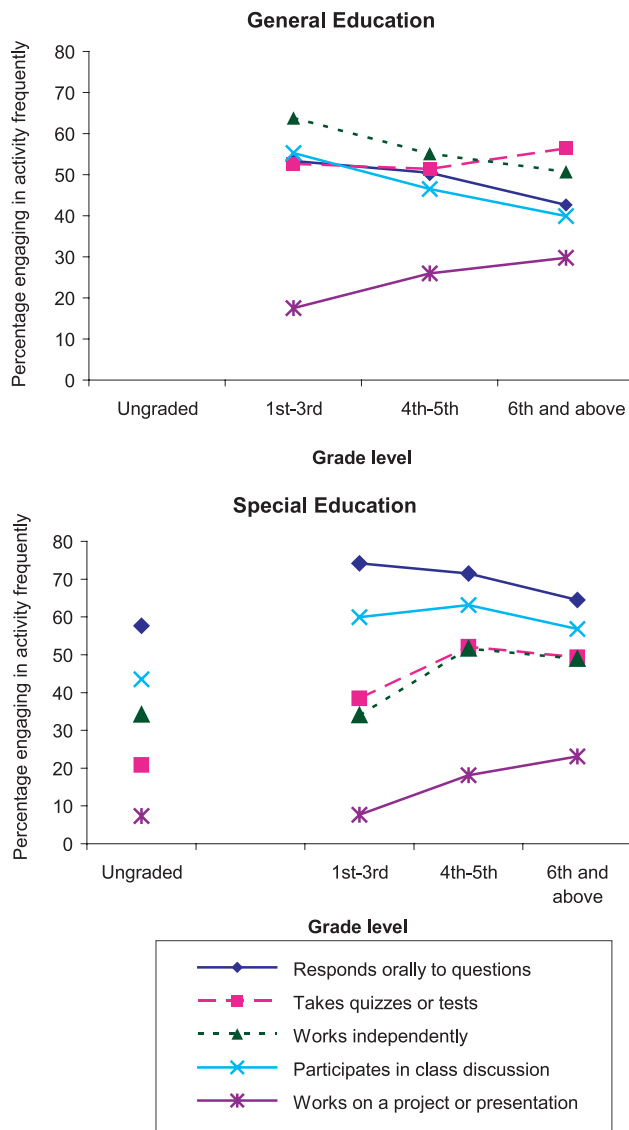
- In general education classes, students with mental retardation are the least likely group to work independently, respond orally to questions, participate in class discussions, or work on projects or presentations frequently, and they are among the least likely to take quizzes or tests frequently. In contrast, students with visual or speech impairments are among the most likely to participate in several types of instructional activities frequently.
- In special education settings, students with learning disabilities are the most likely to work independently, take quizzes or tests, participate in class discussions, or work on projects or presentations frequently. Students with speech impairments are the most likely to respond orally to questions frequently.
- In special education settings, students with autism are among the least likely to take quizzes or tests, respond orally to questions, participate in class discussions, or work on projects or presentations frequently. Students with multiple disabilities also are among the least likely to take quizzes or tests, respond orally to questions, or participate in class discussions frequently.

General Instructional Activities: Grade-Level Differences

As students move from elementary to middle school and from middle to high school, the instructional emphasis shifts from skill acquisition to mastering content knowledge, developing understanding, and applying problem-solving and synthesis skills. This shift in focus leads to changes in the types of activities in classrooms:

- Although working on projects or presentations frequently is more common at the higher grade levels, regardless of setting, it remains less common than other activities (Exhibit 5-7).

Exhibit 5-7
General Instructional Activities of Students with Disabilities
in Language Arts Classes,
by Instructional Setting and Grade Level



- In general education classes, students with disabilities are less likely to work independently frequently in the middle-school grades than in the early elementary grades.
- In general education language arts classes, students with disabilities are less likely to respond orally to questions or participate in class discussions frequently at the upper grade levels than at the lower grade levels.
- In both general education and special education in language arts classes, students with disabilities are more likely to work on presentations frequently in the upper grades than in the lower grades.

- In special education language arts classes, fourth and fifth graders are more likely than first through third graders to take quizzes and tests frequently, but there is little difference in these activities after fifth grade.
- Students in ungraded classes are the least likely to participate in class discussions, respond orally to questions, or take quizzes or tests frequently. Their frequency of working independently or working on projects or presentations approximates those of first- through third-graders.

General Instructional Activities: Demographic Differences

Family socioeconomic status and racial/ethnic group membership play significant roles in the educational experiences of students, both with and without disabilities. Successful teachers and schools consider these types of differences when developing appropriate educational plans for students. SEELS findings demonstrate a number of differences in students' participation in general instructional activities across these dimensions (Exhibit 5-8):

Exhibit 5-8
General Instructional Activities of Students with Disabilities in
Language Arts Classes, by Household Income,
Race/Ethnicity, and Instructional Setting

Percentage engaging in activity frequently	Household Income			Race/Ethnicity			
	\$25,000 and less	\$25,001 to \$50,000	More than \$50,000	White	African American	Hispanic	Asian
General education							
Responding orally to questions	46.8 (4.6)	44.2 (4.3)	58.0 (3.8)	50.1 (2.4)	45.3 (5.9)	46.0 (6.4)	13.6 (14.3)
Taking quizzes or tests	50.6 (4.6)	54.7 (4.3)	54.7 (3.9)	51.5 (2.4)	64.0 (5.7)	58.7 (6.4)	10.9 (13.0)
Working independently	53.7 (4.6)	58.2 (4.3)	59.1 (3.8)	59.0 (2.3)	52.0 (5.9)	54.7 (6.5)	43.9 (21.1)
Participating in class discussion	41.2 (4.5)	46.3 (4.3)	57.9 (3.9)	48.9 (2.4)	41.4 (5.8)	48.7 (6.4)	17.7 (16.1)
Working on a project or presentation	21.6 (3.7)	24.9 (3.7)	32.7 (3.6)	25.3 (2.1)	20.3 (4.8)	26.2 (5.7)	25.9 (18.6)
Special education							
Responding orally to questions	62.4 (3.7)	71.0 (4.3)	74.6 (4.6)	70.2 (2.5)	66.9 (4.1)	64.6 (6.2)	69.6 (19.7)
Taking quizzes or tests	43.0 (3.8)	47.9 (4.8)	45.9 (5.3)	44.9 (2.7)	49.7 (4.3)	50.8 (6.5)	31.5 (19.6)
Working independently	42.0 (3.8)	51.7 (4.8)	43.4 (5.2)	47.2 (2.7)	44.9 (4.3)	44.2 (6.4)	24.2 (18.2)
Participating in class discussion	52.8 (3.8)	63.4 (4.6)	59.2 (5.2)	59.0 (2.7)	59.8 (4.3)	59.5 (6.4)	26.9 (18.9)
Working on a project or presentation	15.0 (2.7)	18.9 (3.7)	18.4 (4.1)	13.4 (2.8)	19.0 (3.4)	33.6 (6.1)	8.2 (11.6)
Sample size							
General education	543	591	886	1,996	338	258	48
Special education	1,083	757	733	2,014	844	459	60

Standard errors are in parentheses.

- In general education classes, students from households in the highest income group are more likely than students in the lowest income group to take part in class discussions or to work on projects or presentations frequently.
- In special education settings, students from households in the highest income group are more likely than students in the lowest income group to respond to oral questions frequently.
- In neither setting is household income associated with students' frequency of taking quizzes or tests or working independently.
- In general education settings, African-American students are more likely than white students to take quizzes or tests frequently. In contrast, Asian/Pacific Islander students are less likely than students of other racial/ethnic groups to take quizzes or tests frequently.
- In special education settings, Hispanic students are more likely than peers of other racial/ethnic groups to work on projects or presentations.

Reading/Language Arts Activities In Language Arts Classrooms

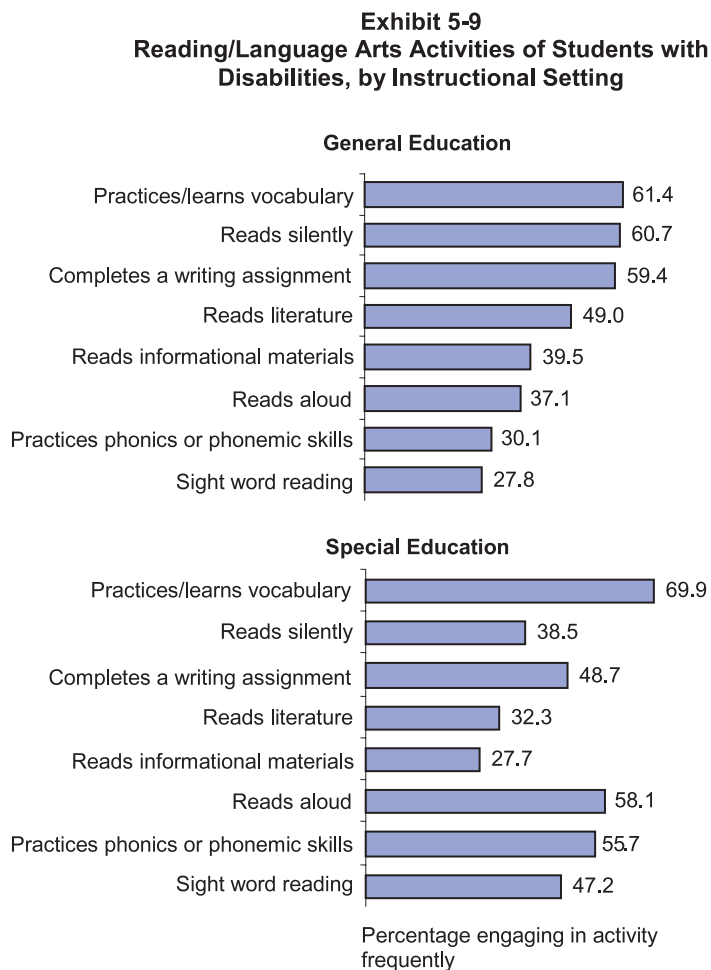
Reading and language arts are arguably the most central academic skills that students must master through their school years (Barr & Johnson, 1991; Gersten, et al., 1998; Kameenui & Carnine, 1998; O'Connor & Jenkins, 1997). Such skills are critical for success and the ultimate completion of school, for functioning in the community, and increasingly for success in the workplace. Not surprisingly, then, the vast majority of interventions to improve academic achievement focus on reading and language arts.

Reading and language arts have generated considerable policy attention at both the state and federal levels. For example, NCLB directs all schools to ensure that students attain adequate yearly progress in reading. Continued research and discussion also have attempted to illuminate how children learn to read and how instruction is best organized to facilitate that learning. Arguments for and against particular methods span a continuum; ranging from explicit skills instruction to meaning-based instruction (Carnine, 1997; Kameenui & Carnine, 1998; Lyon, 1998; O'Connor, 1999; Pressley et al., 2002;). Evidence, collected over two decades, indicates that too many Americans of all ages lack basic reading “decoding” and comprehension skills. Indeed, the challenge of learning to read results in referral to special education for many students with disabilities (Elliott & Thurlow, 2000; Fuchs & Fuchs, 1986; Gersten & Dimino, 1990; Klingner et al., 1998; Koretz, 1988; Marston, 1988; O'Connor, Jenkins, et al., 1993; Thurlow et al., 1998; Ysseldyke et al., 1998). SEELS provides the first national perspective on the types of reading and language arts activities that

students with disabilities receive in elementary and middle school. Primary language arts teachers rated the frequency that students with disabilities in their classes participate in a range of reading and language arts activities, including reading aloud, reading silently, completing writing assignments, reading literature or informational materials, practicing phonics or phonemic skills, practicing vocabulary, and sight word reading.

Participation in Reading/Language Arts Activities Across Instructional Settings

Students with disabilities participate in a variety of reading and language arts activities, whose emphasis varies considerably by instructional placement (Exhibit 5-9).



- In language arts classes in both general and special education settings, the percentages of students who participate in each type of reading activity frequently vary considerably.

- In general education language arts classes, the most frequent reading activities for students with disabilities are learning or practicing vocabulary, reading silently, or completing writing assignments; approximately 60% of students with disabilities engage in these activities frequently. Somewhat less frequent are reading literature, followed by reading informational materials or reading aloud. The least common activities are phonics or phonemic skills practice and sight word reading; approximately 30% of students engage in these activities frequently.
- In special education language arts classes, learning and practicing vocabulary words are the most common reading activities, with approximately 70% of students engaging in this activity frequently. Reading aloud and practicing phonics or phonemic skills are somewhat less common, yet more than half of the students in these settings engage in these activities frequently. Completing writing assignments and sight word reading are still less frequent, followed by reading silently. Least common are reading literature or reading informational materials, with approximately 30% of students engaging in these activities frequently.

Reading/Language Arts Activities: Disability Category Differences

Students' identified abilities and disabilities shape their needs and the activities through which instruction attempts to meet them. For some students, access to alternative content and sensory modalities is most important. For others, the cognitive process itself that is most affected and requires specialized instruction. Students in different disability categories participate in a diverse range of reading and language arts activities (Exhibit 5-10):

- In general education classes, practicing vocabulary is one of the most frequent language arts activities for students in all disability categories. Reading silently and completing writing assignments are also among the most common activities for students in most disability categories. Sight word reading, practicing phonics or phonemic skills, and reading aloud are the least frequent activities for students with in most disability categories.

Exhibit 5-10
Reading/Language Arts Activities,
by Disability Category and Instructional Setting

Percentage engaging in activity frequently:	Learning Disability	Speech/Language Impairment	Mental Retardation	Emotional Disturbance	Hearing Impairment	Visual Impairment	Orthopedic Impairment	Other Health Impairment	Autism	Traumatic Brain Injury	Multiple Disabilities
General education											
Reading aloud	25.8 (3.4)	46.8 (3.1)	21.6 (5.7)	29.0 (4.3)	37.4 (4.6)	36.4 (4.4)	37.7 (4.2)	31.0 (4.4)	42.3 (6.1)	39.2 (9.5)	36.7 (12.4)
Reading silently	50.9 (3.8)	70.9 (2.8)	28.7 (6.3)	51.6 (4.8)	55.0 (4.7)	62.8 (4.4)	63.1 (4.2)	51.7 (4.8)	51.4 (6.2)	41.0 (9.5)	58.5 (12.6)
Completing writing assignment	55.2 (3.8)	66.2 (3.0)	28.6 (6.3)	41.0 (4.7)	64.7 (4.6)	59.9 (4.4)	57.3 (4.3)	55.5 (4.8)	34.6 (6.0)	59.5 (9.5)	53.6 (12.9)
Reading literature	48.1 (3.8)	51.3 (3.1)	23.7 (5.9)	44.8 (4.8)	53.7 (4.7)	52.5 (4.5)	51.5 (4.4)	45.8 (4.8)	53.7 (6.2)	43.2 (9.7)	40.4 (12.6)
Reading informational materials	36.6 (3.7)	44.0 (3.1)	21.1 (5.7)	26.4 (4.2)	47.3 (4.8)	45.4 (4.5)	36.1 (4.2)	33.8 (4.5)	40.1 (6.1)	21.1 (8.0)	28.1 (11.5)
Practicing phonics or phonemic skills	22.6 (3.2)	36.5 (3.0)	38.1 (6.8)	19.6 (3.8)	26.0 (4.2)	30.1 (4.2)	35.9 (4.2)	17.8 (3.7)	28.8 (5.6)	22.0 (8.2)	55.6 (4.5)
Practicing vocabulary	59.0 (3.8)	64.8 (3.0)	45.5 (7.0)	52.0 (4.8)	62.0 (4.6)	61.3 (4.4)	62.5 (4.2)	61.0 (4.7)	58.0 (6.2)	43.5 (9.6)	59.1 (12.6)
Sight word reading	20.9 (3.1)	33.7 (3.0)	35.2 (6.7)	18.0 (3.7)	28.9 (4.3)	23.2 (3.8)	33.0 (4.1)	18.9 (3.8)	32.9 (5.9)	19.4 (7.8)	23.4 (10.9)
Special education											
Reading aloud	59.9 (3.7)	71.6 (6.9)	49.8 (3.1)	62.2 (3.9)	51.6 (4.0)	46.8 (6.8)	49.3 (4.7)	54.3 (5.3)	37.3 (3.5)	54.7 (7.2)	44.6 (4.2)
Reading silently	43.8 (3.7)	35.7 (7.3)	27.4 (2.7)	48.8 (4.0)	43.1 (4.0)	22.2 (5.7)	34.2 (4.4)	35.2 (5.0)	20.9 (3.0)	34.8 (6.9)	26.0 (3.7)
Completing writing assignment	54.5 (3.7)	58.1 (7.6)	35.9 (2.9)	47.4 (4.0)	43.0 (4.0)	34.5 (6.5)	37.0 (4.5)	41.7 (5.2)	26.6 (3.2)	47.0 (7.2)	35.2 (4.0)
Reading literature	37.2 (3.6)	39.5 (7.5)	18.1 (2.4)	33.5 (3.8)	25.8 (3.5)	21.4 (5.6)	27.6 (4.1)	28.3 (4.7)	16.2 (2.7)	26.7 (6.4)	28.3 (3.8)
Reading informational materials	32.6 (3.5)	26.1 (6.7)	17.1 (2.3)	33.5 (3.7)	22.8 (3.4)	18.3 (5.2)	22.2 (3.9)	25.3 (4.6)	14.8 (2.6)	14.0 (5.1)	23.3 (3.6)
Practicing phonics or phonemic skills	53.5 (3.7)	72.4 (6.9)	62.0 (3.0)	51.9 (4.0)	31.7 (3.7)	50.1 (6.9)	54.0 (4.6)	42.2 (5.2)	39.5 (3.6)	51.6 (7.2)	48.3 (4.2)
Practicing vocabulary	69.1 (3.5)	76.2 (6.5)	73.1 (2.7)	72.0 (3.6)	80.4 (3.2)	61.1 (6.6)	62.7 (4.5)	57.9 (5.2)	57.1 (3.6)	70.0 (6.7)	63.7 (4.0)
Sight word reading	41.4 (3.7)	49.2 (7.6)	61.5 (3.0)	49.6 (4.0)	57.2 (4.0)	42.6 (6.8)	46.9 (4.6)	42.8 (5.2)	44.3 (3.6)	53.4 (7.2)	47.2 (4.2)
Sample size											
General education	338	484	97	204	278	298	316	266	195	77	52
Special education	354	86	521	311	432	201	271	222	471	147	371

Standard errors are in parentheses.

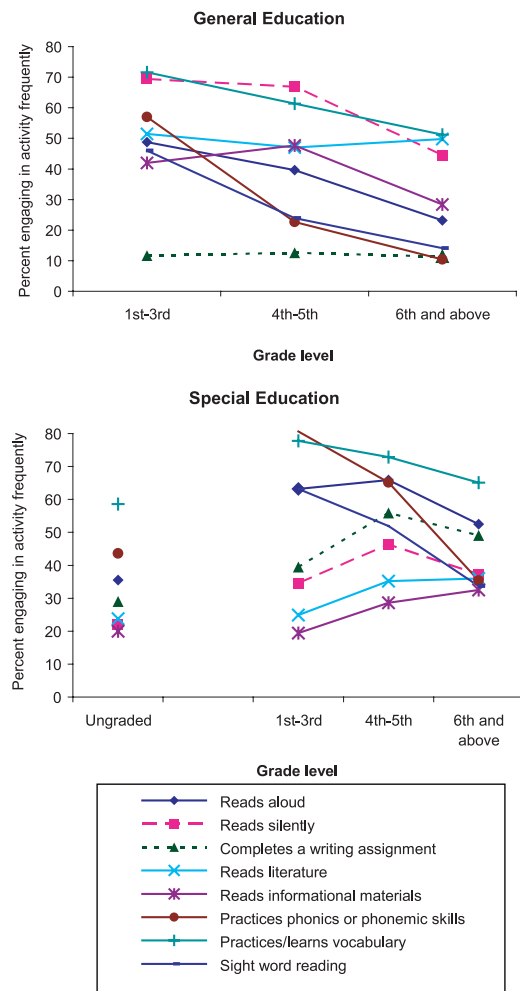
- In general education settings, the patterns of students with mental retardation or multiple disabilities differ from those for students in other disability categories. Practicing phonics or phonemic skills is among the most common activities for these students. In addition, students with mental retardation differ from all other groups in that they are the least likely to engage frequently in five of the eight activities investigated.

- In special education settings, practicing vocabulary is the most common activity, and reading informational materials is the least common activity for students in every disability category. Completing writing assignments and practicing phonics also are among the most common activities for students in most disability categories, whereas reading literature is among the least common.
- In special education settings, students with autism are among the least likely to engage frequently in all eight reading/language arts activities investigated, whereas students with speech impairments are among the most likely to engage frequently in five of the eight activities.

Reading/Language Arts Activities: Grade-Level Differences

Although reading and language arts activities are core parts of the curriculum across the age range, their focus and application vary across grade levels (Exhibit 5-11):

Exhibit 5-11
Reading/Language Arts Activities of Students with Disabilities,
by Instructional Setting and Grade Level



- In general education classes, steady declines with increasing grade levels are noted in the frequency of reading aloud, instruction in phonics, vocabulary activities, and sight word reading for students with disabilities. Reading informational materials and reading silently are about equally likely to be frequent activities for these students through fifth grade and then decline in the middle school grades. Students' frequency of completing writing assignments does not decline significantly across grade levels.
- In special education settings, students' likelihood of practicing phonics, practicing vocabulary, or sight word reading declines across grade levels; however, even in middle school grades, students with disabilities are much more likely to engage in these activities frequently in special education settings than in general education settings.
- In special education settings, the percentage of students who read literature or informational materials frequently increases with grade progression. In the middle school grades, students with disabilities in special education settings are still less likely than their peers in general education settings to read literature frequently, but they are about as likely to read informational materials frequently.
- In special education settings, students in ungraded classes are less likely than students in graded classes to read aloud, read silently, or complete writing assignments frequently, but they are about as likely as students in the first through third grades to read literature or informational materials, and about as likely as students in the sixth grade and above to practice phonemic skills or learn and practice vocabulary frequently.

Reading/Language Arts Activities: Demographic Differences

- In general education settings, students with disabilities from the highest income group are more likely than students from the lowest income group to complete writing assignments frequently, and they are less likely to practice phonics or phonemic skills or learn and practice vocabulary frequently.
- In special education settings, there are no significant differences in the percentages of students who engage in each type of activity frequently in regard to their household income.
- In general education settings, Asian/Pacific Islander students are less likely than their peers in other ethnic groups to read aloud, practice phonics or phonemic skills, or do sight word reading frequently. In contrast, Hispanic students are more likely than white students to do sight-word reading frequently.

- In general education settings, African-American students are more likely than white students to learn and practice vocabulary frequently.
- In special education settings, they are less likely than white students to read aloud frequently.

Exhibit 5-12
Reading/Language Arts Activities of Students with Disabilities,
by Household Income, Race/Ethnicity, and Instructional Setting

Percentage engaging in activity frequently	Household Income			Race/Ethnicity			
	\$25,000 and Under	\$25,001 to \$50,000	Over \$50,000	White	African American	Hispanic	Asian
General education							
Reading aloud	35.6 (4.4)	36.1 (4.2)	40.5 (3.8)	38.2 (2.3)	32.4 (5.6)	39.3 (6.3)	5.1 (9.2)
Reading silently	56.7 (4.5)	62.7 (4.2)	65.4 (3.7)	60.4 (2.3)	58.6 (5.8)	68.9 (6.0)	25.1 (18.2)
Completing writing assignment	53.4 (4.6)	59.3 (4.3)	69.3 (3.6)	62.4 (2.3)	51.3 (5.9)	55.9 (6.5)	43.6 (20.8)
Reading literature	47.6 (4.6)	47.2 (4.3)	56.3 (3.9)	50.1 (2.4)	44.6 (5.9)	49.2 (6.5)	33.9 (19.9)
Reading informational materials	39.4 (4.5)	38.9 (4.2)	45.0 (3.9)	39.7 (2.3)	39.9 (5.8)	39.4 (6.3)	28.6 (19.0)
Practices phonics or phonemic skills	34.7 (4.3)	32.9 (4.1)	22.7 (3.3)	27.9 (2.1)	35.5 (5.7)	34.2 (6.1)	4.2 (8.5)
Practicing vocabulary	73.9 (4.0)	65.1 (4.2)	61.9 (3.8)	65.1 (2.3)	78.2 (4.9)	75.7 (5.6)	56.1 (20.7)
Sight word reading	33.9 (4.3)	30.5 (4.0)	25.2 (3.4)	24.5 (2.1)	30.3 (5.5)	40.7 (6.4)	5.1 (9.2)
Special education							
Reading aloud	49.9 (3.8)	63.2 (4.6)	59.7 (5.1)	62.6 (2.6)	51.9 (4.3)	53.8 (6.5)	60.2 (20.7)
Reading silently	31.3 (3.5)	40.6 (4.7)	41.7 (5.2)	38.7 (2.6)	38.6 (4.2)	39.6 (6.3)	29.5 (19.9)
Completing writing assignment	41.8 (3.8)	51.7 (4.7)	54.0 (5.2)	50.5 (2.7)	43.8 (4.3)	49.9 (6.5)	29.6 (19.4)
Reading literature	25.4 (3.3)	28.3 (4.3)	36.2 (5.1)	32.2 (2.5)	29.4 (4.0)	39.1 (6.4)	7.0 (10.9)
Reading informational materials	22.0 (3.2)	24.9 (4.1)	30.3 (4.8)	27.1 (2.4)	28.5 (3.9)	28.2 (5.9)	8.9 (12.1)
Practicing phonics or phonemic skills	53.1 (3.8)	55.4 (4.8)	55.4 (5.2)	58.4 (2.7)	52.8 (4.3)	50.5 (6.5)	35.1 (20.2)
Practicing vocabulary	68.9 (3.6)	68.1 (4.4)	70.1 (4.8)	68.6 (2.5)	73.0 (3.9)	71.9 (5.8)	81.7 (16.3)
Sight word reading	43.9 (3.8)	47.0 (4.8)	42.8 (5.2)	47.2 (2.7)	52.7 (4.3)	40.6 (6.4)	36.8 (20.4)
Sample size							
General education	543	591	886	1,996	338	258	48
Special education	1,083	757	733	2,014	844	459	60

Standard errors are in parentheses.

Summary

Students with disabilities experience a range of instructional groupings and classroom activities in their primary language arts instruction, across settings, disability categories, grade levels, and demographic groups. However, important differences occur.

Students with disabilities in general education language arts classes experience predominantly whole-class instruction and are more likely than their peers in special education settings frequently to work independently, take quizzes or tests, read silently, read literature or informational materials, and complete writing assignments. In contrast, special education settings provide opportunities for greater teacher-student interactions. Students in those settings are more likely to have small-group or individual instruction, and to take part in class discussions and respond orally to teachers' questions frequently. Their instruction also is more likely to focus on phonics instruction, sight word reading, reading aloud, and learning and practicing vocabulary.

There are some similarities in classroom experiences across disability categories. For example, whole-class instruction is the most common instructional grouping, regardless of disability. However, marked differences also occur. For example, students with learning disabilities or speech impairments are the most likely to receive whole-class instruction and to take part frequently in several classroom activities explored in SEELS. In contrast, students with mental retardation, autism, or multiple disabilities receive the most individual instruction, but are the least likely to take part frequently in many of the classroom activities addressed in this chapter.

Grade-level distinctions also are apparent. At higher grade levels, in both general education settings and special education settings students with disabilities are less likely to be instructed in small groups frequently and more likely to work on projects or presentations. In general education settings, teacher-student interactions, in the form of class discussions and oral responses to questions, decline in frequency as do reading/language arts activities, with the exception of reading literature. In special education settings, student-teacher interactions remain about the same, and the frequency of use of some language arts activities declines, whereas reading literature or informational materials becomes more common. Students with disabilities in ungraded classes are most likely to be instructed individually and are less likely than their peers at the same grade levels to participate in frequently each of the classroom activities investigated in SEELS.

Some classroom experiences do not differ for students with different household incomes or racial/ethnic backgrounds, such as their exposure to whole-class instruction and the frequency with which they work independently in class or take quizzes or tests. However, in general education settings, students with disabilities from higher-income households differ from others in being less likely to receive small-group or individual instruction. They are more likely than others, however, to take part frequently in classroom interactions, such as class

discussions and projects or presentations. In special education settings, students from higher-income households are more likely than students from low-income households to respond orally to questions frequently. In regard to racial/ethnic differences in general education settings, African-American students with disabilities are more likely than white students to receive individual instruction and more likely to take tests frequently. On the other hand, Hispanic students with disabilities in general education settings are more likely than white students to receive small-group instruction frequently, and Asian/Pacific Islander students are less likely than other students to take quizzes or tests frequently.

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